



# REVISIÓN BIBLIOGRÁFICA DICIEMBRE 2018: Selección de artículos

## **BMC Geriatrics**

### **The deprescribing rainbow: a conceptual framework highlighting the importance of patient context when stopping medication in older people**

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#### **Abstract**

The area of “deprescribing” has rapidly expanded in recent years as a positive intervention to reduce inappropriate polypharmacy and improve health outcomes for (older) people with multimorbidity. While our understanding of deprescribing as a process has greatly improved and existing approaches all have patient-centered elements, there is still limited literature exploring the importance of the individual patient context in deprescribing decision-making. This is clearly an important consideration to ensure that any deprescribing approach is ethical, respectful, and successful. To address this gap in the literature, we have developed a conceptual framework in the form of a rainbow – with five different deprescribing determinants – and place the person at the center of the deprescribing process. This framework is informed by literature on patient-centered care for older people and people with multimorbidity. We illustrate the potential application of this framework to a complex patient case to highlight the importance of the different clinical, psychological, social, financial and physical deprescribing determinants, and how this approach could be adopted by those working in clinical practice.

Disponible en: <https://bmcgeriatr.biomedcentral.com/track/pdf/10.1186/s12877-018-0978-x>



# **GERIATRICS AND GERONTOLOGY INTERNATIONAL**

## **Atrial fibrillation and medication treatment among centenarians: Are all very old patients treated the same?**

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### **Abstract**

#### **Aim**

Evidence on antithrombotic therapy use in centenarians diagnosed with atrial fibrillation (AF) is sparse. Our objective was to investigate a possible underprescribing in centenarians relative to younger cohorts of the oldest-old. We assumed lower AF rates; and, within AF patients, lower use of anticoagulants in those who died as centenarians (aged  $\geq 100$  years) than in those who died aged in their 80s ( $\geq 80$  years) or 90s ( $\geq 90$  years).

#### **Methods**

The present study was a quarterly structured cohort study over the 6 years before death using administrative data from German institutionalized and non-institutionalized insured patients (whole sample  $n = 1398$  and subsample of AF patients  $n = 401$  subclassified according to age-of-death groups [ $\geq 80$ ,  $\geq 90$ ,  $\geq 100$  years]). AF, medication, stroke risk (Congestive heart failure; Hypertension;  $2 \times$  Age  $\geq 75$  years; Diabetes mellitus;  $2 \times$  Stroke; Vascular disease; Age 65–74 years; Sex [female] (CHA2DS2-VASc)) and risk of major bleeding (Hypertension; Abnormal renal and liver function; Stroke; Bleeding; Labile International Normalized Ratio [omitted in the present analysis]; Elderly; Drugs or alcohol (HAS-BLED)) were calculated. Generalized estimation equations were used to model the trajectories.

#### **Results**

Half a year before death (T1), AF rates were higher in patients aged  $\geq 80$  years (31.8%) and  $\geq 90$  years (30.6%) compared with patients aged  $\geq 100$  years (22.4%), whereas there were no significant differences between age groups 6 years before death (T0). Of all AF patients with AF at T1, 26.7% received anticoagulants; 11.2% vitamin K antagonists; 15.7% non-vitamin K antagonist oral anticoagulants; and 17.5% platelet inhibitors; yet 58.1% received none of these drugs. Centenarians received significantly fewer anticoagulants compared with the other age groups. Prescriptions of anticoagulants were not associated with CHA2DS2-VASc with and without adjustment for HAS-BLED.

#### **Conclusions**

The present findings highlight the need for more appropriate use of anticoagulation therapy in older patients, as well as for new treatment guidelines taking the heterogeneity of very old patients into account.

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# **BRITISH JOURNAL OF CLINICAL PHARMACOLOGY**

## **Identification of behaviour change techniques in deprescribing interventions: a systematic review and meta-analysis**

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### **Abstract**

#### **Aims**

Deprescribing interventions safely and effectively optimize medication use in older people. However, questions remain about which components of interventions are key to effectively reduce inappropriate medication use. This systematic review examines the behaviour change techniques (BCTs) of deprescribing interventions and summarizes intervention effectiveness on medication use and inappropriate prescribing.

#### **Methods**

MEDLINE, EMBASE, Web of Science and Academic Search Complete and grey literature were searched for relevant literature. Randomized controlled trials (RCTs) were included if they reported on interventions in people aged  $\geq 65$  years. The BCT taxonomy was used to identify BCTs frequently observed in deprescribing interventions. Effectiveness of interventions on inappropriate medication use was summarized in meta-analyses. Medication appropriateness was assessed in accordance with STOPP criteria, Beers' criteria and national or local guidelines. Between-study heterogeneity was evaluated by I-squared and Chi-squared statistics. Risk of bias was assessed using the Cochrane Collaboration Tool for randomized controlled studies.

#### **Results**

Of the 1561 records identified, 25 studies were included in the review. Deprescribing interventions were effective in reducing number of drugs and inappropriate prescribing, but a large heterogeneity in effects was observed. BCT clusters including goals and planning; social support; shaping knowledge; natural consequences; comparison of behaviour; comparison of outcomes; regulation; antecedents; and identity had a positive effect on the effectiveness of interventions.

#### **Conclusions**

In general, deprescribing interventions effectively reduce medication use and inappropriate prescribing in older people. Successful deprescribing is facilitated by the combination of BCTs involving a range of intervention components.

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## **DRUG SAFETY**

### **Gabapentin and Pregabalin and Risk of Atrial Fibrillation in the Elderly: A Population-Based Cohort Study in an Electronic Prescription Database**

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#### **Abstract**

##### **Introduction**

Gabapentin and pregabalin are widely prescribed to elderly people, but data on their pharmacokinetics, safety, and efficacy in this population are scarce. Neurological adverse effects are common. Atrial fibrillation (AF) associated with their use has been described in several case reports and case series, but the incidence is unknown.

##### **Objective**

The aim of this study was to assess the association between exposure to gabapentin or pregabalin and AF in the elderly.

##### **Methods**

Patients  $\geq 65$  years of age starting treatment with either gabapentin or pregabalin between January 1 and March 31, 2015, free of cardiovascular disease, and who did not receive the alternate study medications were studied. They were compared with patients who initiated treatment with an analgesic opiate or with alprazolam or diazepam. The two primary outcome variables were a first claim of an oral anticoagulant plus an antiarrhythmic drug (OAC + AA), or of an oral anticoagulant or an antiplatelet agent plus an antiarrhythmic drug (OAC/APA + AA), in the 3 months after treatment initiation.

##### **Results**

Compared with opiate analgesics, both gabapentin and pregabalin were associated with an increased risk of initiating OAC/APA + AA. The incidence was 6 of 668 (9.0 per 1000 patients) with gabapentin, versus 12 of 3889 (3.1 per 1000) with opiates, relative risk (RR) 2.91 (95% confidence interval [CI] 1.10–7.73), and for pregabalin it was 6 of 698 (8.6 per 1000) RR 2.79 (95% CI 1.05–7.40). The comparison with alprazolam/diazepam gave similar results. The risks did not vary by age, sex, or co-treatment with NSAIDs, and they increased with dose.

##### **Conclusion**

In elderly patients free of cardiovascular disease, an association between new exposure to gabapentin or pregabalin and initiating treatment for AF was found. These results should be confirmed in other studies.

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# **EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY**

## **The associations of geriatric syndromes and other patient characteristics with the current and future use of potentially inappropriate medications in a large cohort study**

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Abstract

### **Purpose**

To assess the changes in use of potentially inappropriate medication (PIM) as defined by the 2015 Beers criteria, the EU(7)-PIM, and the PRISCUS list over a 6-year period and to identify determinants for current and future PIM use with a particular focus on geriatric syndromes.

### **Methods**

In a German cohort of 2878 community-dwelling adults aged  $\geq 60$  years, determinants of the use of  $\geq 1$  PIM were identified in multivariable logistic regression (cross-sectional analysis) and weighted generalized estimating equation models (longitudinal analysis).

### **Results**

Prevalences for Beers, EU(7), and PRISCUS PIM were 26.4, 37.4, and 13.7% at baseline and decreased to 23.1, 36.5, and 12.3%, respectively, 6 years later. Unadjusted prevalences in participants with any geriatric syndrome (frailty, co-morbidity, functional, or cognitive impairment) were approximately twice as high as in robust older adults. In multivariable analyses, cognitive impairment was statistically significantly associated with the use of PIM of all three criteria in the cross-sectional (odds ratio (OR) point estimates 1.90–2.21) but not in the longitudinal models. In contrast, frailty, co-morbidity, and functional impairment were statistically significantly associated with the use of PIM of at least one of the three criteria in both models. However, the associations varied for the PIM criteria, and in the longitudinal analysis, associations were only statistically significant for Beers PIM (ORs [95% confidence intervals]: frailty (2.23 [1.15, 4.31]), co-morbidity by five total co-morbidity score points (1.21 [1.05, 1.38]), and functional impairment (1.51 [1.00, 2.27])). Other statistically significant determinants of the incidence of PIM (any definition) were female sex, age, coronary heart disease, heart failure, biomarkers of the metabolic syndrome, and history of ulcer, depressive episodes, hip fracture, or any cancer.

### **Conclusions**

Older adults with frailty, co-morbidity, cognitive, and functional impairment had higher odds of taking PIM or getting a PIM prescription in the future (exception: cognitive impairment). Physicians should be especially cautious when prescribing drugs for these patients who are particularly susceptible to adverse reactions.

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